UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, California

VIA E-MAIL, U.S. MAIL, AND HAND-DELIVERY

March 19, 2010

Mr. Steve Helvey
City Manager
13230 Penn Street
Whittier, CA 90602-1772

Dear Mr. Helvey:

In order to facilitate cleanup of hazardous substances at the Omega Chemical Superfund Site, EPA divided the site into three operable units ("OUs"). OU-1 includes the former Omega Chemical facility and immediate vicinity. OU-2 is the contamination in groundwater that originated from the former Omega Chemical facility and which now extends more than four miles downgradient (south / southwest) of OU-1. OU-3 refers to indoor air contamination in buildings near the former Omega Chemical facility.

As part of its investigation, the U.S. Environmental Protection Agency (EPA)'s March 2009 draft Remedial Investigation (RI) report for OU-2 presented information regarding a source of contamination called "TCE Source at Whittier Boulevard" (see enclosed Figure 1).

The City of Whittier recently requested a summary of this information after EPA requested access to property owned by the City of Whittier in order to continue the Agency's ongoing investigation of the TCE source area on Whittier Boulevard. This letter summarizes findings from field investigations conducted to characterize the trichloroethylene (TCE) contamination source, which is located near the intersection of Whittier Boulevard and Mar Vista Street, in Whittier. This letter also includes some of the known operational history of the area near the source.

As discussed in further detail below, we are postponing our request for access to City property for the purpose of taking soil samples and direct-push groundwater samples in the vicinity of the TCE Source. However, as I recently discussed with you, we still require access to the shallow groundwater monitoring well (MW31) that was installed in the City's right-of-way.

Location of Source Area

Based on the available data, the TCE source area appears to be located on the east side of Whittier Boulevard immediately north of Mar Vista Street (approximate boundary shown

within dashed yellow line on Figure 2). This TCE source area encompasses three adjacent assessor parcels, referred to herein as the northern, southern and eastern parcels. The northern parcel is located at 12353 Whittier Boulevard (Assessor Parcel Number (APN 8141-002-004), and has a lot size of approximately 45,000 square feet; the southern parcel, located at 725 Whittier Square (formerly 12363 Whittier Boulevard) (APN 8141-002-904), is roughly 21,340 square feet; and the eastern parcel is a former railroad right-of-way (APN 8141-002-901) (see Figure 2).

Groundwater generally flows in a southwesterly direction in the vicinity of the former Omega Chemical facility, which was located at 12504 and 12512 Whittier Boulevard. The TCE source area is located to the northwest, in an up- and cross-gradient direction from the Omega facility.

History of Operations

From 1955 to 1987, the northern parcel was operated by the former American Cushion Manufacturing Company (American Cushion), which did business as Tropical Sun Outdoor Company and Regal Fireplace Equipment Company. During this time period, one or more of these companies manufactured garden and patio furniture, and used and generated materials (including hazardous materials) such as: paint, oil, organic wetting agents, phosphoric acid, chromic acid, and hexavalent chromium. Activities associated with operations on the property included cutting aluminum tubes, aluminum tube bending, grinding/buffing, sewing, a paint booth, hand degreasing using toluene, and a degreasing tank with 1,1,1-trichloroethane (TCA). Prior to 1955, the northern parcel was owned and / or operated by Whittier Walnut Growers Association from 1939 to 1942, Sunset Nut Shelling Company from 1942 to 1951, and Sunset Sterna Food Company from 1951 to 1955. Uses of the northern parcel prior to 1939 are unknown. The northern parcel is currently occupied by several automotive repair and maintenance facilities.

The southern and eastern parcels are currently owned by the City of Whittier, which purchased the parcels on 12/10/01 from the Union Pacific Railroad Company (Union Pacific). Additional information regarding the southern and eastern parcels derives from documentation that may not be publicly releasable. We are attempting to determine whether a claim of confidentiality has been made over this documentation. At this time, however, we cannot provide further information related to past operations on either of these parcels.

Summary of Field Investigations

Initial Site Investigation Conducted at Northern Parcel by IT Corporation

A preliminary assessment of the northern parcel was conducted in 1987 by IT Corporation for Halferty & Debeikes Properties which owned the property in 1988/89, after American Cushion ceased operations. The preliminary assessment identified three potential areas of contamination: a dip tank area located in the southeast corner of the former American Cushion building, a paint booth area, and a soil strip located on the west side of the

property near Whittier Boulevard. Soil samples were taken from each area and analyzed for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals. Major contaminants detected in the soil samples included TPH, arsenic, cadmium, copper, lead, zinc, bis (2-ethylhexyl)phthalate, and pyrene.

Soil Removals

In 1988, TPH-contaminated soil was removed from the northern parcel by GEOFON Incorporated for Halferty & Debeikes Properties. In 1988, the County of Los Angeles Department of Health Services (LACDHS) agreed that site contamination had been mitigated, and issued a closure report stating no further follow-up was required.

In 1989 and 1990, soil contaminated with TPH and/or pesticides, and debris classified as hazardous waste was removed from the southern parcel. This case remains open under the oversight of the Los Angeles Regional Water Quality Control Board; lead oversight is with the L.A. County Department of Public Works. The case is listed in the Regional Board's online GeoTracker database at the following URL:
http://geotracker.swrcb.ca.gov/profile_report.asp?global_id=T0603700212.

Investigation Conducted by Weston Solutions, Inc.

Weston Solutions, Inc. (Weston), an EPA contractor, performed field investigations in 2001 and 2002 to characterize contaminant distributions downgradient of the former Omega Chemical facility. These field investigations identified chlorinated hydrocarbons and Freon compounds as the primary groundwater contaminants. That investigation also found TCE in a swath northwest (up- and cross-gradient) of the former Omega Chemical facility, in concentrations ranging from approximately 200 to 960 micrograms per liter (µg/L). Figure 2 shows the sampling locations and results for PP048, PP0001, and B098. The contamination at these sample locations could not be explained as having originated from the Omega Chemical facility. As such, Weston concluded that a separate source of TCE appeared to be present north of Baldwin Place (Weston, 2003).

Field Investigation Activities Conducted by CH2M HILL during Omega OU2 RI

On behalf of EPA, CH2M HILL conducted the RI field work, which included the collection of additional field data to characterize the TCE source at Whittier Boulevard.

In February and March 2007, 13 direct-push borings (HPA-1, HPA-6 to HPA-10, and HPA-12 to HPA-18) were completed as part of this investigation and were used to collect discrete groundwater samples. One discrete groundwater sample was collected for each boring location. The sampling depths ranged between 95 and 110 feet below ground surface (bgs). The sampling locations and results are shown on Figure 2.

- Borings HPA-1 and HPA-6 to HPA-10, within the Caltrans right-of-way, served as downgradient sampling points.
- Borings HPA-12, HPA-13, HPA-14, and HPA-15 also served as sampling points thought to be downgradient of the source area.
- Borings HPA-16, HPA-17, and HPA-18 served as upgradient sampling points, and were located on the eastern parcel.

The results of HILL's 2007 sampling confirmed that TCE is the predominant contaminant beneath the TCE source area. TCE was detected in upgradient and downgradient locations, but higher concentrations were generally reported in downgradient samples. No upgradient sources of TCE are suspected to exist; none have been identified, and it is likely that upgradient detections are the result of local contaminant spreading into the shallow subsurface, rather than a separate source. The results indicate that a narrow plume of TCE extends from the TCE source area, across Whittier Boulevard, continues on a southwesterly path, and eventually merges with the Omega OU-2 groundwater plume.

Additional Investigation Conducted after Issuance of Omega OU2 Draft RI Report

After issuance of the draft RI report in March 2009, EPA contemplated additional field investigations throughout OU-2 to further characterize the potential groundwater contamination sources identified in the draft RI report, including the TCE source at Whittier Boulevard. Although CH2M HILL initiated these investigations in 2009, the City requested additional information about the TCE source and proposed investigations before agreeing to grant access for sampling activities. The field investigations initially proposed included:

- Three direct-push groundwater samples (Hydropunch®) -- to characterize the southern extent of the high TCE concentrations in groundwater, and to characterize groundwater concentrations upgradient of previous detections.
- Three soil samples -- one upgradient of the highest detected TCE concentrations in groundwater; one near the former dip tank on the northern parcel; and one near a former paint booth on the northern parcel. At each location, two soil samples were to be collected at depths of approximately 10 feet and 30 feet bgs.
- Installation of one shallow groundwater monitoring well (MW31).

These locations are identified in Figure 2.

At present, EPA has installed the well, and has decided that the additional investigations of the TCE source area will not be completed at this time. The information is not necessary for completion of the RI report. However, additional sampling likely will be needed in the future, as discussed below.

Results and Status of the Post-Draft RI Additional Investigation

Monitoring well MW31 was installed in September 2009, and a groundwater sample was collected from the well for VOC analyses. The sample showed a TCE concentration of 1,000 µg/L, which exceeds the drinking water limit of 5 ug/L. EPA also took a second sample from MW31 in March 2010. We appreciate your concurrence of this sampling event and seek to memorialize the City's grant of access to MW31 for semiannual sampling and on an as-needed basis (e.g., maintenance). We also understand that the City would like us to obtain a retroactive permit for this well. Please let us know whether city staff intends to take this issue to the City Council before granting future access and, if so, the timing for such approval.

Soil sampling was conducted in September 2009 at two depths at two of the three proposed locations. The results of those samples (SS4-1, SS4-2, SS4-3 and SS4-4) are shown on Figure 2. TCE was detected in all four soil samples at concentrations between 9 and 170 micrograms per kilogram (µg/Kg). The third soil sampling location was put on hold when the City requested additional information about sampling and prior TCE field investigations before granting access to EPA and CH2M HILL.

The three direct-push groundwater samples were delayed for the same reason.

Summary

Results from EPA's latest field investigation confirmed the presence of a source of TCE contamination in soil and groundwater located northeast of Whittier Boulevard (marked by a yellow dashed line in Figure 2). Cleanup of the TCE contaminated soil and groundwater seems to be warranted based on the concentrations of TCE detected in soil and groundwater samples collected in the TCE source area.

The final RI report and OU-2 Feasibility Study report will identify all known source areas within the Site (including the OU-2 plume), which are or may be contributing to contamination. Although cleanup of these source areas will not be addressed as part of the interim OU-2 remedial action (expected to be selected later this year), the known source areas will either be addressed by the final Site-wide remedial action EPA selects at some point in the future, or by current or future State-led actions. Consistent with that approach for OU-2 source areas, EPA does not plan to conduct additional sampling at the TCE source area as part of the RI/FS for the OU-2 interim remedial action. As noted previously, EPA does intend to continue groundwater sampling of MW31 on a semiannual basis. In addition, EPA may need to access the well on an as-needed basis (e.g., for maintenance).

We expect additional sampling will be needed in the future, to fully characterize the TCE source area, to pinpoint the location of the TCE release and to provide information to help identify the potentially responsible party or parties. Further field investigations to fully characterize the lateral and vertical distributions of TCE in the vadose zone and in the

groundwater beneath the TCE source area would be needed to support the selection of an appropriate cleanup action for this area. EPA, the California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB) will continue to discuss whether such a future investigation and cleanup action would occur under State lead.

I hope the City finds this information regarding the TCE Source area to be useful. Please contact me if you have additional questions at (415) 947-4183 or via email at deschambault.lynda@epa.gov.

Sincerely,

Lynda Deschambault

Lynda Deschambault
Remedial Project Manager
USEPA Region 9

Cc: Stephen Berninger, USEPA
Linda Ketellaper, USEPA
Lori Parnass, DTSC
Art Heath, RWQCB

TCE Source
See Figure 2

See Figure 5-2 for detailed Hydropunch results

See Figure 5-3a for detailed Hydropunch results

See Figure 5-3b for detailed Hydropunch results

See Figure 5-3c for detailed Hydropunch results

See Figure 5-3 for detailed Hydropunch results

See Figure 5-5 for detailed Hydropunch results

See Figure 5-7 for detailed Hydropunch results

See Figure 5-6 for detailed Hydropunch results

See Figure 5-4 for detailed Soil Gas results
See Figure 5-6 for detailed Hydropunch results

See Figure 5-8 for detailed Hydropunch results

Legend

- EPA Monitoring Well (July 2007)
- Omega Potentially Responsible Parties Organized Group (OPOG) Monitoring Well (August 2007)
- Oil Field Reclamation Project (OFRP) Well
- Waste Disposal, Inc. (WDI) Well (4th Quarter, 2002)
- Ashland Chemical Well (August 2007)
- Production Well
- CENCO Wells (August - November 2006)

Historical Boring Locations

- Auger Boring (Weston, August 2002 - August 2003)
- CPT Boring (Weston, August 2001 - August 2002)

Composite TCE Plume Extent

- 5 ug/L (Dashed where Approximate)
- 100 ug/L
- 500 ug/L (Dashed where Approximate)
- Water Level Contours July-August 2007
- Former Omega Facility

- Approximate Boundary of Other Facilities
- Approximate Boundary of Other Facilities with no Known Impact to Groundwater

References:
Ashland Chemical Co.: URS, 2008.
Foss Plating: Winefield & Assoc., Inc., 2006.
Lincoln Distribution Center: SCS Engineers, 1995.
McKesson and Angeles Chemical Co. Facilities: DTSC, 2007.
Modine Manufacturing: The Earth Technology Corporation, 1990.
Phibro-Tech: Iris Environmental; 2006.
Site A: Dames & Moore, 1996.
Site B: Thorne, 1989.
Site C: URS, 2003.
Techni-Braze, Inc.: LFR, 2006.
Unocal Corp.: Environmental Equalizers, 1998.

N

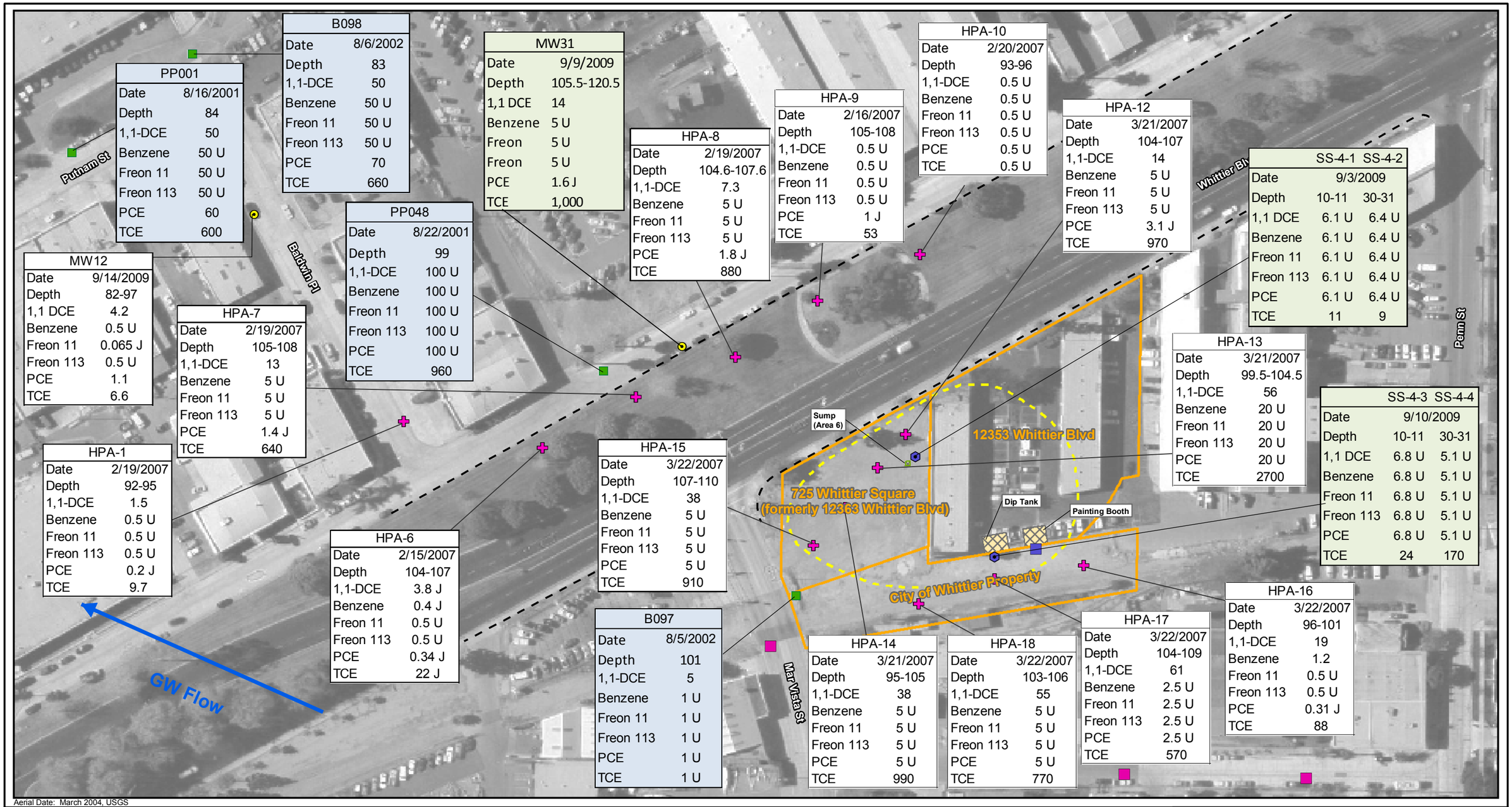
0 1,000 2,000 Feet

Notes: 1) Trichloroethene (TCE) Concentration in ug/L
2) J - Estimated Value
3) U - Non-Detect
4) E - Estimated value as the concentration exceeds upper level of instrument calibration range.
5) NS - Not Sampled
6) Historical Boring Location results were used to supplement July-August 2007 groundwater sampling results
7) Ashland Chemical Co. well IDs may be found in Appendix N

Figure 1
Composite TCE Distribution
Omega Chemical Superfund Site

CH2MHILL

Date: May 30, 2008



Aerial Date: March 2004, USGS

Legend

- EPA Monitoring Well
- Hydropunch (2007)
- Soil Sample (2009)
- Potential New Hydropunch
- Potential New Soil Sample
- Historical Hydropunch
- Right of Way
- Dip Tank and Paint Booth
- Sump (Area 6)
- Estimated Potential Source Area
- Facility Boundary
- 32-35 Depth of Hydropunch / Soil Sampling (Feet below Ground Surface)

Chemical Description:

1,1-DCE	1,1-Dichloroethene
Benzene	Benzene
Freon 11	Trichlorofluoromethane
Freon 113	1,1,2-Trichloro-1,2,2-trifluoroethane
PCE	Tetrachloroethene
TCE	Trichloroethene

Notes: 1) Results posted are in ug/L 2) U - Non-Detect 3) J - Estimated Value

Chemical Concentration Units:
Soil Sample = ug/Kg
Groundwater Sample = ug/L
Feet Below Ground Surface (fbg)

N

0 100 200 Feet

Figure 2
Results of Groundwater, Soil, and Hydropunch Sampling
TCE Source at Whittier Blvd
Omega Chemical Superfund Site

CH2MHILL

Date: 3/15/2010

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